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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,862	11/26/2002	Edward Demarest	DSC-02043	3385
31661	7590	06/23/2005		
PROTON ENERGY SYSTEM 10 TECHNOLOGY DRIVE WALLINGFORD, CT 06492			EXAMINER JACKSON, ANDRE K	
			ART UNIT	PAPER NUMBER
			2856	
DATE MAILED: 06/23/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

H.D

Office Action Summary	Application No. 10/065,862	Applicant(s) DEMAREST ET AL.	
	Examiner André K. Jackson	Art Unit 2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 8-12 is/are pending in the application.
- 4a) Of the above claim(s) 5-7 and 13-61 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 8-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Prior art shown in figure 1 in view of Harada et al.

Regarding claim 1, the Prior art shown in figure 1 has a first separator (24), a second phase separator (28); a first combustible gas sensor (36) adjacent the second separator outlet and the first sensor being spaced a predetermined distance from the second separator outlet opening (Figure 1). The Prior art shown in figure 1 does not disclose where the second separator inlet is fluidly connected to the first separator outlet. However, Harada et al. disclose in the patent entitled "Hydrogen and oxygen gas generating system" where the second separator inlet is fluidly connected to the first separator outlet (connection (4) between (7A) and (32) Figure 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Prior art to include where the second separator inlet is fluidly connected to the first separator outlet. By adding this feature the apparatus would be able to fully measure the content of the gas.

3. Claims 2-4 and 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Prior art shown in figure 1 in view of Harada et al. and in further view of Whynall et al.

Regarding claim 2, the Prior art shown in figure 1 does not disclose an air movement device arranged to move air between the second separator outlet opening and the first sensor. However, Whynall et al. disclose in the patent entitled "Monitoring system" an air movement device (24) arranged to move air between the second separator outlet (30) opening and the first sensor (32). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Prior art shown in figure 1 to include an air movement device arranged to move air between the second separator outlet opening and the first sensor. By adding this feature the apparatus would be able to advance the air for a more efficient measurement.

Regarding claim 3, the Prior art shown in figure 1 discloses where the sensor includes a sensing surface and is arranged where the sensor surface is perpendicular to the second separator (Figure 1).

Regarding claim 4, the Prior art shown in figure 1 does not disclose an air movement device arranged to move air in a direction parallel to the sensing surface. However, Whynall et al. disclose an air movement device arranged to move air in a direction parallel to the sensing surface. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Prior art shown in figure 1 to include an air movement device

arranged to move air in a direction parallel to the sensing surface. By adding this feature the apparatus would be able to advance the air for a more efficient measurement.

Regarding claim 8, the Prior art discloses where the second separator outlet opening is separated from the second separator conduit (34).

Regarding claim 9, the Prior art discloses an orifice coupled to the conduit arranged between the second separator and the outlet opening (40).

Regarding claim 10, the Prior art discloses where the second phase separator includes a valve arranged to drain water from the second separator (30).

Regarding claim 11, the Prior art shown in figure 1 does not disclose where the orifice has an opening of less than 0.025 inches. However, it is considered a design choice and clearly within the purview of the skilled artisan to provide an orifice opening to accommodate the need of the instrument's size and pressure needs.

Regarding claim 12, the Prior art shown in figure 1 discloses a coalescing filter.

Response to Arguments

4. Applicant's arguments with respect to claims 1-4 and 8-12 have been considered but are moot in view of the new ground of rejection.

Applicant argues that connection (4) in Harada et al., which pierces the wall of the reservoir (7/7A), cannot be fluidly connected to one another. The claim calls for the second separator inlet to be fluidly connected to the first separator outlet.

Connection (4) pierces container (7) and leads into cell (1). Outflow pipe (3) is fluidly connected to separator (7A) (Figure 1) and outflow pipe (3) is fluidly connected to both (32) and (7A) through connection (4). Therefore, (7A) would be fluidly connected to (32) through connection (4). In another embodiment shown in figure 3 there is a fluid connection between (7/7A) and (32) the connection of (4) and also the connection of (38) and (75).

In response to Applicant's argument that combination of the two systems would not perform the desired function of enhancing the drying of the gas stream, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory

action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to André K. Jackson whose telephone number is (571) 272-2196. The examiner can normally be reached on Mon.-Thurs. 7AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A.J.

June 16, 2005

AJ

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